Test plan for Bookstore System

Introduction:

This document details the testing plan for the Inventory System. The purpose of this test plan is to define the objectives, scope, strategy, and criteria for testing the system’s features.

Test Objectives

* Ensure the system meets the functional requirements as detailed in the SRS.
* Validate the system’s non-functional requirements.
* Identify and rectify defects prior to release.
* Ensure the application accurately handles data and operations.
* Confirm error handling and validation mechanisms.
* Verify integration between different modules.
* Ensure usability and efficiency of the command-line interface.

Test Strategy

* Unit Testing:
* Integration Testing:
* System Testing:
* Boundary Testing:
* Error Path Testing:
* Data Integrity Testing:
* Usability Testing:
* Performance Testing:

Test Scope:

* In Scope: All features listed under the Functional Requirements section int the SRS.
  + UI-based interactions.
  + Ability to browse and search for specific books.
  + View book details and reviews.
  + Adding books to database

Features to be Tested:

1. Loading webpage
2. Presence of element
3. Search functionality
4. Table interaction

Assumptions and Dependencies

1. The application is fully implemented.
2. The testing environment mimics bookstore setup.
3. All required configurations are in place for testing.
4. A database or mock data is available for testing purposes.

Test Deliverables:

* Test cases and scripts.
* Test data.
* Problem reports and improvement suggestions
* Test summary report.

Testing Tasks:

1. Prepare the test environment with necessary dependencies.
2. Construct and critically evaluate test cases grounded in the SRS, HDL, and LLD.
3. Execute test cases.
4. Document the test results and any defects.
5. Review and retest after defects are addressed.

Test Cases:

* **See Addendum**

Test Data:

Functional Requirements

Test Case ID: 0001

Description: Validate book title search functionality

Input: “If Tomorrow Comes”

Expected Output: Title: If Tomorrow Comes, Author: Sidney Sheldon, Genre: Adventure stories, Page Count: 501, Published: 1994, Add to cart.

Expected Result: Relevant book title is displayed in the results.

Actual Result: The relevant book title was displayed in the results.

Level of Testing: Unit

Pass/Fail: Pass

Test Case ID: 0002

Description: Validate that the search functionality only accepts book titles.

Input: Search for titles...: “Christian Life”

Expected Output: Title Author Genre(s) Page Count Published Add to Cart

Expected Result: The program does not return any results.

Actual Result: The program did not return any results.

Pass/Fail: Pass

Test Case ID: 0003

Description: Validate book sorting functionality.

Input: “Sy”

Expected Output: Title: “All Families are Psychotic”, Author: Douglas Coupland, Genre(s): Dysfunctional families, Page Count: 279, Published: 2002, Add to cart

Expected Result: The programs display all books that contain ‘sy’ in the title.

Actual Result: The program displayed all books that contained ‘sy’ in the title.

Level of Testing: Unit

Pass/Fail: Pass

Test Case ID: 0004

Description: Validate adding a new book to the site

Input: Title: “Harry Potter and the Philosopher’s Stone”, Author(s): J.K. Rowling, Genre(s): Fantasy, Pages: 223, Release Year: 1997

Expected Output: Title: “Harry Potter and the Philosopher’s Stone”, Author(s): J.K. Rowling, Genre(s): Fantasy, Pages: 223, Release Year: 1997, Add to cart.

Expected Result: The program saves the input to the database and can be searched by the user.

Actual Result: The program saved the input to the database and was able to be searched.

Pass/Fail: Pass

Test Case ID: 0005

Description: Validate that the “Pages” and “Release Year” Field only accepts integers.

Input: Title: “The Outsiders”, Author(s): S.E. Hinton, Genre(s): Young Adult Fiction, Pages: A, Release Year: B

Expected Output: No Output

Expected Result: The Pages field and the Release Year field do not accept the strings.

Actual Result: The two fields did not accept the strings.

Pass/Fail: Pass